

YOUR FOREST YOUR ADVENTURE

Fall 2009 • VOL 4 • NO 3



Jefferson Memorial Forest

11311 Mitchell Hill Road
PO Box 467
Fairdale, KY
40118
502/368-5404

www.memorialforest.com
www.metro-parks.org
forest@louisvilleky.gov
parks@louisvilleky.gov

Welcome Center

Monday-Saturday
8:30 a.m.-4:30 p.m.
Sunday/Holidays
10 a.m.-3 p.m.

The Welcome Center is your destination for maps, gift items, program reservations, camping reservations, permits and Forest information.

Directions

From I-65 south, take the Gene Snyder Freeway (I-265) west and exit at New Cut Road. Turn left, go about one mile, and turn right onto Mitchell Hill Road. Follow the signs to the Forest.

Mission Statement

The mission of Louisville Metro Parks is to create a City of Parks and enhance the quality of life for citizens of Louisville Metro by maintaining and acquiring attractive, vibrant parks and offering safe, diverse recreation programs, and protecting these lands and resources for future generations.

ENGAGING LOUISVILLE'S CHILDREN

Louisville ECHO (Engaging Children Outdoors), Metro Parks' signature environmental education initiative, continues to gain momentum. The program started in 2008 with seed funding from the U.S. Forest Service, through their "More Kids in the Woods" program. This partnership with Jefferson County Public Schools gives fourth and fifth grade students at four urban elementary schools multiple field investigations and trips over the course of a school year.

Louisville ECHO offers these children experiences that will develop their love and appreciation for nature and the outdoors – experiences that enhance their education, encourage them to be active in the outdoors, and develop their sense of stewardship. In the long term, our community will ultimately benefit from these children's growth and development through the program.

Over the last year, we have worked diligently to secure funding for the program for the 2009-10 school year and beyond. The Forest Service was so satisfied with last year's program that, although "More Kids in the Woods" funds were no longer available, they decided to provide \$14,000 in funding from their Regional Office in Atlanta for this year. In addition, we are very happy to report that we've recently received a \$5,000 grant from Toyota Manufacturing of Kentucky and \$500 from



District 1 Metro Councilwoman Dr. Judy Green. And we must not forget our other wonderful partners, including Olmsted Parks Conservancy and Jefferson County Soil and Water Conservation District.

The theme of Jefferson Memorial Forest's program is showing students how their actions make an impact on the natural world around them and how natural and man-made



systems are interconnected. Students take field trips throughout the year to nearby parks, camp in Jefferson Memorial Forest, and visit Daniel Boone National Forest at Red River Gorge. Teachers receive professional development in environmental education methods, exploration kits and sets of field guides for their classroom.

If you would like more information on how you can bring this program to your child's school, please contact Tonya Swan or Bennett Knox at 368-6856. If you wish to make a contribution to support this program, please call the Louisville Metro Parks Foundation at 456-1857.



Bennett Knox, Parks Administrator

LAND MANAGEMENT NOTES

TREE-OF-HEAVEN, OR TREE-FROM-HELL

We are often asked, “What is our most invasive plant in the forest?” We usually respond by saying it depends on what part of the forest one is visiting. However, recent forays into all areas of the forest by University of Kentucky researchers indicate the **Tree-of-Heaven** is our most invasive plant. Researchers have found seedlings of Tree-of-Heaven in the most remote areas of the forest, even where no evidence of a parent tree exists.

Tree-of-Heaven, or Stinking Sumac as it is sometimes called, botanically is *Ailanthus altissima*. Native to Northern China, Ailanthus is the only species of the Simbaroubaceae (Quassia Family) hardy in Europe and North America. It was introduced in 1784 to Philadelphia by John Hamilton and its popularity soared. Simultaneously, during the gold rush, Chinese miners brought Ailanthus with them to California for medicinal and cultural reasons. So, our invader gave us a double whammy from both ends of the nation.

The nursery industry quickly promoted the Tree-of-Heaven as an all purpose tree primarily because it was easily propagated from seed and suckers, produced shade quickly, was resistant to insects and grew in almost any conditions. In 1838, famous landscape architect Andrew Jackson Downing extolled its beauty. By the 1850s, it became popular as a street and park tree and was extensively planted in urban areas, arboreta and suburban homes. In fact, landscape architect Frederick Law Olmsted even specified it for our parks.

In 1852, Downing opposed Ailanthus in his magazine *The Horticulturist*: “Down with the Ailanthus” and “odorous Aliathuses.” He said it had “drawn away our attention from our own more noble native American trees.” It was still promoted by the landscape trade in the 1890s, but by the 1920s it was no longer used in the United States. It was allowed to spread on its own, and spread it did!

Tree-of-Heaven is often confused with Staghorn and Smooth Sumac because their pinnately compound leaves are similar in appearance at a casual glance. Both Sumacs can have 11 to 31 leaflets while Tree-of-Heaven can have up to 41 leaflets. It can be easily distinguished from Staghorn Sumac, which has branchlets clothed with long soft brown hairs. While both Sumacs have sharply toothed leaf margins, Tree-of-Heaven’s leaf margins are entire (smooth) except for two or more coarse glandular teeth near the base. The real giveaway is the odor; just crush a leaf and one will never forget the foul aroma, even though some refer to the odor as smelling like peanut butter.

AILANTHUS KNOWS NO BOUNDARIES

Once thought to invade forest openings and edges; it will grow almost anywhere a seed lands, even in cracks in a sidewalk. Tree-of-Heaven inspired Betty Smith’s “A Tree Grows in Brooklyn”, a story about a young girl intrigued by the resiliency of Ailanthus, using it as a guideline for her life. It is now considered to be a dangerous weed in forest plantations because native seedlings cannot establish fast enough to compete with Ailanthus sprouts. It quickly adapts to almost any environment, often forming impenetrable thickets that increase in size annually. Historically, in its native country, it was used medicinally and as an insect repellent. However, people have complained of stomach pains from drinking water from wells near where Tree-of-Heaven grows, cows will not eat grass near sprouts, and it has caused contact dermatitis as well. It is now found in all of the lower 48 U.S. states.

By far, the most serious threat posed by this “tree from heaven” is that it produces chemical compounds which have no apparent role in life but to retard or prevent the growth of other species. This phenomenon is known as allelopathy, in this case a substance called ailanthone is produced. Not only does ailanthone

exhibit allelopathic tendencies, it is now considered by some researchers to produce compounds which act as an herbicide. Tests have shown toxicity to at least 45 different plant species.

WHAT CAN WE, AS STEWARDS OF THE LAND, DO ABOUT THIS THREAT?

Early detection and rapid response is important, such as hand-pulling seedlings before they get established, and eliminating mature trees... especially female trees. Particularly around the Forest, we can urge neighbors to remove Ailanthus from their properties to reduce the possibility of spread. While the literature mentions several methods for removal, we have found the “hack and squirt” method from June to October to be the best. Use a hatchet or machete to make slash marks around the tree then apply an appropriate glyphosate-based herbicide, such as Round-Up, in those slash marks. The resulting snag decays quickly. Another commonly used method is cut and paint, where the tree is completely removed then the herbicide is painted on the stump. Make sure the cambium layer is completely saturated. We have found that his method tends to produce root suckering. Foliar sprays can be used on the suckers and larger seedlings. Diligence and monitoring is the key regardless of which approach is used.

Now, you decide, is it the Tree-of-Heaven or the Tree-from-Hell?

Carl Suk, Land Manager





FALL '09 MAYOR'S HIKE

The fifth annual Mayor's Healthy Hometown Hike takes place at Jefferson Memorial Forest on Saturday, October 17, from 10 a.m. to 2 p.m. Come out and get your pumpkins, take a hay ride, and hike through the forest at the height of fall color!

The hike is part of the Mayor's Healthy Hometown Movement, encouraging better health and fitness by highlighting opportunities for increased physical activity. The event is free to the public and the first 500 participants receive a t-shirt. Mayor Jerry Abramson will kick off the event before the hiking and festivities begin at the Horine section of the Forest.

We'll have 100 medium pumpkins to give away, and small pumpkins for kids to paint, so this is a great time to select your favorite Halloween decoration. Our volunteer trail rangers and Forest staff will lead hikes for all different skill levels. Volunteer naturalists will lead special children's hikes to the Environmental Education Center where families can view exhibits and meet our education animals up close, while learning interesting facts about these and other animals that call the forest home.

There will also be a wide array of informational booths offering many resources for health, eating right, and living green.



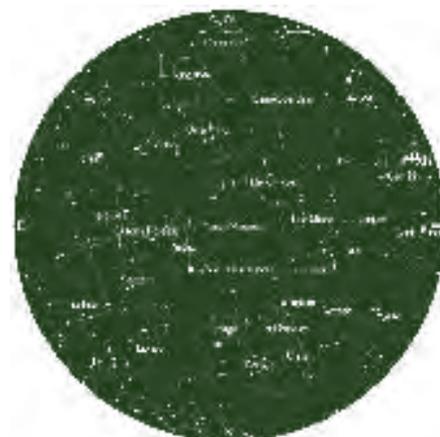
THIS LIVES IN YOUR BACKYARD

Meet the region's largest beetle, the Eastern Hercules beetle *Dynastes tityus*. This extraordinary guy, also known as the Rhino beetle because of the males' large frontal horns, lives throughout the Eastern United States, including Kentucky.

As an adult, he can reach an impressive 3 inches in length and a more impressive 4 1/2 inches in length as a grub (see below). His bright colors, freaky horns, and gigantic size make him an instant attraction when found here at the Forest. *(continued on back page)*



WINTER SKY DELIGHTS



*...From windows in my father's house,
Dreaming my dreams on winter nights,
I watched Orion as a girl
Above another city's lights.
Years go, dreams go, and youth goes too,
The world's heart breaks beneath its
wars,
All things are changed, save in the east
The faithful beauty of the stars.*

from Sara Teasdale's "Winter Sky"

Our hazy, humid summer nights are long gone and that lack of moisture in the air makes the night sky clear and lustrous. Trade in your mosquito repellent for a warm jacket and you can enjoy the evening star gazing.

Winter constellations range from the easily recognizable Orion with his belt of three stars to the less well-known Canis Major (the great dog, found by following Orion's belt down and to the left). Sirius, the brightest star in the night sky, is located in Canis Major. Sirius is twice the size of our sun, but somewhere around 50 trillion miles away. If you want to take a visit in the space shuttle, you will need about 324,000 years of vacation!

Some of my other favorite winter formations are the Great Square of Pegasus, Cassiopeia, Cepheus, and Gemini. A star chart will help you find these and other objects in the night sky. The website www.heavens-above.com allows you to print out a free chart for any location and any time and day of the year. A chart, warm clothes, dark skies, and your eyes are all you need for an interesting evening.

-Shawn Nevins, naturalist



VOLUNTEERS

VOLUNTEER OPPORTUNITIES

Jefferson Memorial Forest serves as the flagship park and headquarters for Metro Parks Natural Areas Division, which oversees more than 7,000 acres of public land set aside specifically for the preservation and conservation of natural habitat. Of that, over 6,000 acres are in Jefferson Memorial Forest. Other areas include Kulmer Beach Reserve, Fairmount Falls, Caperton Swamp, the Beargrass Creek Greenway and Waverly Park.

Natural Areas volunteers assist with trail development and maintenance, help with conservation and preservation efforts, report on trail conditions, remove litter and assist in teaching public programs. Some individuals or groups offer their services for single-day projects, while others complete applications to become part of our core ongoing volunteer base, described below.

NATURAL AREAS VOLUNTEER GROUPS

Land Stewards are botanists-in-action, aiding with the removal of noxious plants, replanting and restoration, locating and mapping native flora, and other conservation/preservation pursuits.

Trail Team members develop new trails, maintain existing trails, offer public assistance, and provide reporting on conditions and usage patterns.

Volunteer Naturalists assist staff and/or lead field trips and public programs, providing environmental education to visitors.

Forest Ambassadors are on-call volunteers, providing assistance with varied tasks such as staffing booths or directing parking during special events, helping with crafts during summer camps, or delivering flyers and advertising materials.

Whether you have limited availability or just want to try us out before you commit, individuals are always welcome! Land Stewards and the Trail Team have monthly project days as listed below. All project days begin at 9 a.m. at the Forest's Welcome Center unless listed otherwise. Feel free to come on out and meet our outstanding crews, or give us a call for more information.

LAND STEWARDS

2nd Saturday
2nd Wednesday
4th Thursday

TRAIL TEAM

2nd Saturday - Welcome Center
3rd Saturday - Waverly Park
4th Saturday - Forest's Paul Yost section

For more volunteer information, visit www.memorialforest.com or contact Sherry Wright, Volunteer Coordinator, 502-380-1753 or sherry.wright@louisvilleky.gov.

UofL SOUL PERFORMS COMMUNITY SERVICE IN NATURAL AREAS PARKS

On Saturday, August 22, University of Louisville's SOUL – Student Outreach Uniting Louisville – generously contributed a Saturday afternoon to community service in Louisville's parks.

Thirteen young ladies and one happy young man worked alongside our Land Management team to spread mountains of mulch and pull weeds by the bagful, providing vast improvement to the landscape surrounding the Forest's Welcome Center.

An additional 23 students worked in Waverly Park to remove over 800 feet of retired trail by breaking up compacted surfaces, raking and spreading natural cover, blocking entrances and removing two old bridges.

Our thanks go out to these 37 civic-minded young people, who together donated 92.5 hours of community service valued at \$1,850!*

* Based on the national average value of a volunteer hour as stated by Independent Sector Research, www.independentresearch.org.

VOLUNTEER NATURALIST TRAINING BEGINS SOON!

Do you want to learn more about the Forest and all of its incredible inhabitants? Do you have a passion for nature and want to share your appreciation with others? Volunteer Naturalist Training prepares volunteers to work closely with Forest education staff to lead classes, field trips and public programs. Through a 15-week series of classes, volunteers enhance their understanding of the Forest ecosystem, deepen their knowledge of the history of Jefferson Memorial Forest and its inhabitants, learn teaching methods and develop presentation skills.

This program includes all class instruction, special perks like volunteer field trips, optional trainings and participation in the volunteer appreciation program. There is a \$25 fee to cover all class materials and uniform shirt.

Classes begin the second week of January, on Monday, January 11 and Saturday, January 16. Trainings are offered on Mondays or Saturdays, to accommodate both weekday and weekend availability. All classes are from 9 a.m. to Noon.

Current Volunteer Naturalists are standing by to offer encouragement and mentor new trainees through the program and into active volunteering. Don't miss the opportunity to join this amazing group of volunteers!

To register or for more information, call the Welcome Center at 502-368-6856.

VOLUNTEER NATURALIST TRAINING SCHEDULE

Mon • Jan 11, 19 (Tue for MLK holiday), 25, Feb 1, 8, 16 (Tue), 22, Mar 1, 8, 15, 22, 29, Apr 5, 12, 19

Sat • Jan 16, 23, 30, Feb 6, 13, 20, 27, Mar 6, 13, 20, 27, Apr 3, 10, 17, 24

Requirements:

- Able to provide own transportation
- Able to traverse uneven terrain for periods for up to 30 minutes
- Able to communicate clearly with the public
- Able to handle small reptiles, amphibians and mammals



VOLUNTEERS

VOLUNTEER SPOTLIGHT

MEET MARGIE JONES, VOLUNTEER LAND STEWARD

Margie has been a Land Steward since February 2009. In that short time, she has logged 130 hours of service! A dedicated outdoorswoman, Margie volunteers every Wednesday – and an occasional Saturday – to help the Land Management Team with conservation efforts. Regardless of her task, Margie pitches in with a smile to remove invasive plants, replant, locate and map native flora, and even haul mulch!

A professional yoga instructor, Margie came to Louisville in 2003. Born and raised in Colorado, she traveled extensively before settling here. Homesickness for her native Colorado pushed Margie to search out natural areas to explore in this area. The Forest won her over with its 35 miles of hiking trails and more than 6,000 acres of woodland. Ecological differences between the two regions fed Margie’s curiosity about Kentucky’s native flora. Lucky for us, this curiosity led her to inquire about volunteering as a Land Steward. “I volunteered because I enjoy being outside,” says Margie, “and I learn a great

deal from Carl! It feeds my intellectual side.”

Land Stewards often spend the morning hours working on a conservation project, and the afternoon hours with Carl Suk, our Land Manager, in on-the-job training. Carl refers to this as the “fun time,” when he teaches the volunteers plant identification, preservation and conservation skills and restoration methods. The service-learning

combination appeals to Margie’s need for both expanded knowledge and giving back to her community. She says, “I believe strongly in nature...it enriches our lives... its preservation is important to me.”

Hats off to Margie for her dedication, her smiling face and willing attitude! The entire community benefits from her love of nature and sense of responsibility for public land.



COMMUNITY SERVICE PROJECTS

Jefferson Memorial Forest offers a wide variety of community service projects available for civic groups and scouts working to gain Eagle rank. Some projects can be done in a day, while others require several work days to

complete. Whether your group has a few members or many, Forest staff can help you identify an appropriate project. All projects are designed to meet Eagle Scout criteria, providing opportunities to accept responsibility for quality work, planning, management and organizational skills they will need as adults.

Some recent Eagle projects include the construction of a trailside retaining wall (Jordan Miller, Troop 346, bottom right), a compost bin for the Environmental Education Center (Colin Curtis, Troop 40) and birdfeeders and birdhouses for the Welcome Center (Sam Broyles, Troop 346, top right). Several scouts continue efforts to advance trail development, build information kiosks and improve our preschool discovery area.

For more information on service projects, visit our website or contact Sherry Wright, Volunteer Coordinator, at 502-380-1753 or sherry.wright@louisvilleky.gov.





PUBLIC PROGRAM CALENDAR: SEPTEMBER THROUGH DECEMBER

The Forest offers programs for all ages. For more information visit our website at www.memorialforest.com or call the Welcome Center at 502/368-5404. Our staff will be happy to help make reservations, give directions to the program location, or provide a complete schedule of programs throughout the year. For all programs, please wear close-toed walking shoes and dress for the weather.

Reservations are required in advance. The Forest reserves the right to cancel programs due to insufficient registration or inclement weather. Rain checks will be provided.

PRESCHOOL NATURE ADVENTURES

This program is for parents and their children ages 3 -5. Includes story-time, craft, snack and active exploration time outside. Program meets in the Horine Environmental Education Center. Fee: \$9 per child

A SQUIRREL'S STASH

Sat, October 10, 9:30 to 11:30 a.m.

Tue, October 13, 9:30 to 11:30 a.m.

The leaves are changing color and the squirrels are busy storing food for the winter. We'll go in search of this food and look for clues pointing to where squirrels and chipmunks have hidden their food supply. How do they find their food in the winter? Find out in this program.

WINGS AND THINGS: BIRDS

Tue, Nov 10, 9:30 to 11:30 a.m.

Sat, Nov 14, 9:30 to 11:30 a.m.

Big birds, little birds, blue Birds, red Birds. We have all kinds of birds in the forest. Little ones can watch as the birds eat and listen to them sing. Each child will make their own feeder to bring the birds into their yard at home.

EVENING PROGRAM: NIGHTTIME STORIES

Fri, October 9, 7 to 10 p.m.

The night has always been a time of mystery and wonder and the subject of storytellers through the ages. Forest staff will weave together the stories passed down by the Native Americans and other cultures to explain this time of wonder and the constellations that have guided many a traveler home. Families welcome. Program includes s'mores around a fire. Program meets in the Horine Reservation. Fee: \$6 per person

GETTING TO KNOW YOUR FOREST HIKE: BLUE TRAIL IN THE PAUL YOST

Sat, October 10, 9:30 a.m. to 11:30 a.m.

With a few hills here and there, this trail really feels like you are in the deep forest. Learn about the interesting history of the man named Paul Yost, and why this section is named after him. The hike is a 2.7 mile loop, considered moderate but with a few ups and downs. It takes approx. 1.5 hours. This Hike will meet in the Paul Yost parking lot. If you are not familiar with this area, please ask the reservationist to provide you with directions. Fee: \$6 per person

HOWL AT THE MOON DOG HIKE

Fri, October 16, 7 to 8:30 p.m.

Come out to the Forest for an evening romp through the woods with your dog! Forest staff will lead owners and their pooches on a hike through the woods. Keep in mind that your dog will be around other dogs and people. Non-retractable leashes and good behavior are required. As a courtesy to other dogs, please make sure your pet is up to date on their vaccines. Meets in the Horine Reservation. Fee: \$6 per dog

CHILDREN IN NATURE

This series of classes are meant to intrigue the young and old alike. Participation is tracked and points earned for each session. A prize will be given at the end of the series to the family with the highest score.

HUSTLE AND BUSTLE IN THE FOREST: GETTING READY FOR WINTER

Sat, October 17, 9:30 to 11:30 a.m.

Awards Day! Prizes will be awarded to

the families with the most Passport of Discovery points. If you have come out to any of the programs be sure you come to this one! Volunteer Naturalists have a special finale program planned that gets your family hustling and bustling to get ready for winter in the forest too! Last chance to accumulate more points before the prize winning finale! Fee: \$10 per family (limit 4) \$5 for each additional person

FAMILY FISHING FUN: WAVERLY LAKE

Sat, October 24, 9 a.m. to 11:30 p.m.

Sink a line with us in search of the Forest's wet and scaly wonders. Investigate the aquatic environment—the plants, the fish, and their neighbors. Participants will also learn about fishing safety. A great activity for parents and kids ages 7 and up. All children must be accompanied by an adult. All equipment is provided. Fee: \$10 per family (limit 4) \$5 for each additional person

PUBLIC ALPINE TOWER CLIMB

Sat, October 31, 9 p.m. to 1 p.m.

Come challenge yourself on the 52-foot climbing tower. Learn basic climbing and belaying techniques while experiencing increased self-esteem, confidence, and problem-solving skills for tackling this "High altitude" obstacle course. This program is for ages 10 and up. A parent or guardian must accompany all participants under the age of 18. Please wear: tennis shoes, long pants or shorts with an inseam at least 5 inches in length for your own comfort in the harness. Sign up early as space is limited to 18 participants. Meets in the Horine Reservation. Fee: \$10 per person

NATIVE TREES IN YOUR LANDSCAPE

Mon, November 2, 9 a.m. to 12 p.m.

Fall is the best time of year to plant trees. Carl Suk, Jefferson Memorial Forest Landscape Manager will share his knowledge of the native trees of Kentucky. He will discuss the benefits and beauty of native trees and recommend trees that work best in a Kentucky gardener's landscape. He will provide a list of nurseries where native trees are available. Meets in the Horine Conference Center. Fee: \$10 per person, includes any materials

ORIENTEERING

Sat, November 7, 9 a.m. to 12:30 p.m.

Get lost...then learn the skills that will help you find your way back to your campsite! Our staff will show you the basics of orienteering and planning a path that will get you to your destination. A great activity for parents and kids ages 10 and up. Please dress for the weather. Meets at the Horine Parking Lot. Fee: \$6.

WELCOME CENTER HOLIDAY OPEN HOUSE

Sat, December 5, 10:30 a.m. to 4 p.m.

Get ahead on your Christmas shopping and find something for the outdoor enthusiasts on your list! Enjoy refreshments, holiday music, and special holiday discounts while shopping by a cozy fire as you browse our gift shop and check off your holiday list. Fee: Free

ELIMINATE WASTE AND GET THIS NEWSLETTER BY EMAIL!

Do your part to save trees and keep our costs down, by emailing forest@louisvilleky.gov with the request "subscribe to newsletter." Include your name and the mailing address where you received this issue, and you will then only receive electronic copies of future newsletters.



Butterfly Milkweed (Asclepias tuberosa) is a wonderful native plant that requires very little maintenance and provides long-lasting color in the summer and interesting texture in the fall. It is available in many local nurseries.

UNIQUE PLAYGROUND UNDER DEVELOPMENT

Natural Areas program staff, led by Naturalist Christa Weidner, is developing and implementing an outdoor nature play area for preschoolers that uses natural products to ignite a child's imagination. Once completed, it will be the first of its kind in Louisville. We are working to certify the project through Nature Explore, a collaborative project of the Arbor Day Foundation and Dimensions Educational Research Foundation. For Christa, this is an exciting project she is looking forward to completing!

The nature play area will have a climbing area, "messy" materials area, nature art area, action area, building area, and music area. We plan to incorporate Native American instruments and designs, and most items will be made from items found in nature. For instance, the climbing area – which is close to completion – will incorporate trees damaged in last winter's ice storm.

The new playground will be located in the Horine Section of Jefferson Memorial Forest.

In addition to support from our maintenance staff, Christa is also seeking help from interested volunteers. She has identified several Eagle Scout projects for those who are interested. Currently, we have a Boy Scout, Jordan Butts, helping us with our first big project, spreading mulch and building some tables for the nature art area and building area as he pursues his Eagle Scout badge.

The pictures shown in this article are from the Missouri Botanical Garden's Nature Explore Classroom. If you want to learn more about Nature Explore Classrooms, visit www.arborday.org. If you are interested in volunteering to assist with the construction of this new area, please contact Sherry Wright at 368-6856.

Jefferson Memorial Forest
11311 Mitchell Hill Road
PO Box 467
Fairdale, KY 40118

tel • 502/368-5404
email • forest@louisvilleky.gov
web • www.memorialforest.com

PRSR STD
US Postage
PAID
Louisville, KY
Permit #1151



Jerry E. Abramson, Mayor
Louisville Metro Council



Metro Parks
www.metro-parks.org

Forest/Parks Natural Areas Staff

Bennett Knox
Parks Administrator
Brian Lewis
Infrastructure Manager
Tonya Swan
Public Education Manager
Carl Suk
Land Manager
Larry Hilton
Naturalist/Trails Supervisor
Vickie Howser
Welcome Center
Katheryn Lynn
Naturalist/Programs Reservationist
Shawn Nevins
Naturalist/Programs
Jerry Waddell
Maintenance Supervisor
Christa Weidner
Naturalist/Programs
Sherry Wright
Volunteer Coordinator

continued from page 3

Eastern Hercules beetles are members of the beetle order Coleoptera, which means shielded wing. Beetles were named such because their outer most set of wings, known as elytra, are really hard casings not used in flight but used as protection. Think of a lady bug as she opens her “shell” down the middle in preparation for flight. That shell is actually a set of hard wings adapted as a type of protection, or shield, for her other wings. Eastern Hercules beetles can fly in their adult stage, but are more commonly found on the forest floor, nibbling on some decaying wood.

Beetles are the largest order of described life forms on earth, with over 300,000 identified species classified so far. To put that into perspective, if we were to line up all species in the world, including plants, in a straight line, every fifth slot would be filled by a type of beetle.

You may be a little wary about picking up this particular beetle, with those big pinchers, but they are fixed horns that cannot be moved to hurt you. Males use these horns to fight other males in competition for females. After winning such a battle, males mate with females in a sometime lengthy process, with mating taking up to 50 minutes.

The Eastern Hercules beetle goes through the classic complete metamorphic cycle. During the summer, a female will lay up to 40 eggs over a one month period. Eggs hatch about 30 days later into a larval

state. Larvae live entirely underground, feeding on decaying wood of trees. It is during this stage that horn size is determined. The more nutrients the larvae receive, the larger the horn.

After a period of 12 to 18 months, the larvae enter into pupal stage, hibernate for a few months, and emerge as fully formed adults. These awesomely huge adults feed on decaying wood and sap from ash trees, and have been seen eating ash bark. Basically, Hercules beetles have a good old-fashioned vegetarian diet. Adults typically live three to six months, rarely up to a year. So if you ever get the opportunity to see an adult in nature, consider yourself lucky!



Katheryn Lynn, Naturalist